

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Jc971 U.S. PTO  
09/990385  
11/23/01

In re application of :  
Koji YANAI et al. :  
Serial No. NEW : **Attn: Application Branch**  
Filed November 23, 2001 : **Attorney Docket No. 2001-1611**

$\beta$ -FRUCTOFURANOSIDASE AND ITS  
GENE, METHOD OF ISOLATING  
 $\beta$ -FRUCTOFURANOSIDASE GENE,  
SYSTEM FOR PRODUCING  
 $\beta$ -FRUCTOFURANOSIDASE, AND  
 $\beta$ -FRUCTOFURANOSIDASE VARIANT  
(Rule 1.53(b) Divisional Application  
of Serial No. 09/142,623,  
Filed September 10, 1998)

THE COMMISSIONER IS AUTHORIZED  
TO CHARGE ANY DEFICIENCY IN THE  
FEES FOR THIS PAPER TO DEPOSIT  
ACCOUNT NO. 23-0975

**INFORMATION DISCLOSURE STATEMENT**

Assistant Commissioner for Patents,  
Washington, DC 20231

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of [X] the references listed on attached form PTO-1449 and/or [] the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 is enclosed, except a copy is not provided for each reference previously cited by or submitted to the Patent Office in prior parent application Serial No. 09/142,623, filed September 10, 1998.

1a. [X] This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, or

before the mailing date of the first Office Action on the merits,

**and thus no certification and/or fee is required.**

- 1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

- (1) ☐ the certification of paragraph 2 below is provided, **or**  
(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

- 1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

**the certification of paragraph 2 below is provided, and  
the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.**

2. It is hereby certified

- a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or  
b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

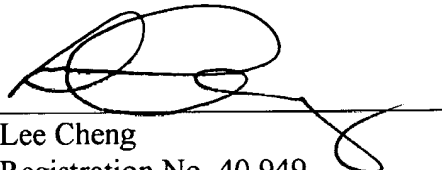
3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:
- a. ☐ a full or partial English language translation submitted herewith,
  - b. ☒ a foreign patent office search report (in the English language) submitted herewith,
  - c. ☐ the concise explanation contained in the specification of the present application at page ,
  - d. ☒ the concise explanation set forth in the English language abstract, submitted to the Patent Office in prior parent application Serial No. 09/142,623.
  - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☒ Also enclosed is a copy of the International and European Search reports citing some of the references and International Preliminary Examination Report.
6. ☐ Applicants also offer the following comments for the Examiner's consideration:

Respectfully submitted,

Koji YANAI et al.

By

  
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November 23, 2001

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)  
(Use several sheets if necessary)

Date Submitted to PTO: November 23, 2001

ATTY DOCKET NO.  
2001-1611SERIAL NO.  
NEWAPPLICANT  
Koji YANAI et al.FILING DATE  
November 23, 2001

GROUP

19971 U.S. PTO  
09/90385  
11/23/01

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						
	AB						
	AC						

## FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
RH	AD	JP 61-268190	11/27/86	Japan	—	—	Abstract
	AE						
	AF						

## OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

RH	AG	L.M. BODDY et al., "Purification and Characterisation of an <i>Aspergillus niger</i> invertase and its DNA sequence", Current Genetics, Vol. 24, pp. 60-66, (1993).					
RH	AH	G. BLATCH et al., "Molecular Characterization of a Fructanase Produced by <i>Bacteroides fragilis</i> BF-1", Journal of Bacteriology, Vol. 175, No. 10, pp. 3058-3066, May 1993.					
RH	AI	M. HIRAYAMA et al., "Purification and Properties of a Fructooligosaccharide-producing $\beta$ -Fructofuranosidase from <i>Aspergillus niger</i> ATCC 20611", Agricultural and Biological Chemistry, Vol. 53, No. 3, pp. 667-673 (1989).					
RH	AJ	Y. Hatayama et al., "The purification of $\beta$ -Fructofuranosidase from <i>Scopulariopsis brevicaulis</i> N-01", Nippon Nogeikagaku Kaishi, Vol. 824 (70), pg 297 (1996).					
RH	AK	Yoshiaki Hatakeyama et al., "Kinetic Parameters of $\beta$ -Fructofuranosidase from <i>Scopulariopsis brevicaulis</i> ", Journal of Fermentation and Bioengineering, Vol. 81 (6), pp 518-523 (1996).					
RH	AL	Toyohiko Nakamura et al., "Occurrence of Two Forms of Extracellular Endoinulinase from <i>Aspergillus niger</i> Mutant 817", Journal of Fermentation and Bioengineering, Vol. 78, No. 2, pp. 134-139 (1994)					
	AM						

EXAMINER

DATE CONSIDERED

3/14/03

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.